

National Weather Service Storm Data and Unusual Weather Phenomena



Time Path Path Number of Estimated February 1998
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

MICHIGAN, East

MIZ063-069>070-076-083 St. Clair - Oakland - Macomb - Wayne - Monroe

A strong low pressure system moved from Arkansas to the lower Ohio Valley on the 17th, then proceeded to the eastern Great Lakes on the 18th. Strong southerly flow ahead of the low advected high amounts of moisture toward the Great Lakes from the Gulf of Mexico. Rain fell occasionally on the 16th, 17, and 18th. In southeast Michigan, the heaviest rain occurred in the Detroit area on the 17th. Rainfall totals during the three days were commonly over two inches, most of that falling from about 10 am to 6 pm EST on the 17th. Some of the higher rainfall amounts over the three days were: 2.85 inches in Dundee, 2.55 inches in Adrian, 2.48 inches in Mt Clemens, 2.65 inches in Grosse Pointe Farms, and 2.69 inches in Dearborn. Detroit Metropolitan Airport recorded 2.81 inches over the three days, of which 2.24 inches fell on the 17th. Average rainfall for the entire month of February at Detroit is 1.74 inches.

The resulting flooding hit hardest in eastern Monroe County, where lakeshore flooding exacerbated runoff problems. East winds gusted as high as 45 mph, pushing the Lake Erie water level to 3.5 feet above normal at Luna Pier. This water level was the highest in recent memory according to area residents, and was topped by 6 foot waves on the night of the 17th. The high water and pounding surf destroyed two private docks in Luna Pier, and flooded many roads near the lakeshore. In addition, the abnormally high lake levels prevented effective runoff further inland. As a result, some flooding of roads and basements occurred across all of Monroe County.

Urban flooding was a significant problem in parts of Wayne County. Hundreds of basements and many streets were flooded in the cities west and southwest of Detroit. A state of emergency was declared for much of Wayne County. Taylor, Dearborn Heights, Westland, and Grosse Ile were among the hardest hit communities. High water briefly closed the Southfield Freeway just north of Interstate 94.

In Macomb County, Warren, St. Clair Shores, and Clinton Township were among the communities that experienced urban and lowland flooding. Again the most common problems were basement and road flooding. Lakeshore flooding from Lake St. Clair closed some roads all along the Macomb County shoreline, but problems here were not as severe as further south in Monroe County

Limited flooding occurred in St. Clair and Oakland Counties. A few roads were closed in southern St. Clair County due to high water. A few roads and basements flooded in southern Oakland County, most notably in the Farmington area.

Runoff caused several area rivers to exceed flood stage (see below)

MIZ070 Macomb

The Clinton River near Fraser went above its 16 foot flood stage at 8 pm EST on the 17th. The river crested at 18.0 feet at 2 am EST on the 18th, then fell below flood stage at 10 pm EST on the 18th.

MIZ076 Wayne

18 0500EST 0 0 Flood

The Rouge River at Detroit went above its 15 foot flood stage at 5 am EST on the 18th. The river crested at 17.8 feet at noon EST on the 18th, then fell back below flood stage at 5 am EST on the 19th.



National Weather Service Storm Data and Unusual Weather Phenomena



Time Path Path Number of Estimated February 1998
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

MICHIGAN, East

The Lower Rouge River at Inkster went above its 10 foot flood stage at 5 am EST on the 18th. The river crested at 12.3 feet at 8 pm EST on the 18th, then fell back below flood stage at 2 pm EST on the 19th.

MIZ082 Lenawee

19 0900EST 0 0 Flood 21 1500EST

The River Raisin at Blissfield went above its 683 foot flood stage at 9 am EST on the 19th. The river crested at 684.1 feet at 1 am EST on the 20th, then fell back below flood stage at 3 pm EST on the 21st.

MIZ083 Monroe

The River Raisin at Dundee went above its 650 foot flood stage at 7 am EST on the 21st. The river crested at 650.3 feet at 9 am EST on the 21st, then fell back below flood stage at 10 pm EST on the 21st.